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10/014,664	12/14/2001	Frederick Johannes Bruwer	P.19385	4865

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MOORTHY, ARAVIND K	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/014,664	BRUWER, FREDERICK JOHANNES	
	Examiner	Art Unit	
	Aravind K. Moorthy	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 February 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-37 and 39-63* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *25-37 and 39-63* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This is in response to the appeal brief filed on 1 February 2008.

2. Claims 25-37 and 39-63 are pending in the application.

3. Claims 25-37 and 39-63 have been rejected.

4. Claims 1-24 and 38 have been cancelled.

Response to Arguments

5. In view of the appeal brief filed on 1 February 2008, PROSECUTION IS HEREBY REOPENED. The rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 25-37 and 39-63 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. After a careful review of the specification, the examiner finds no support for the limitation of "mathematical difference".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 25-30, 34-37 and 39-60 are rejected under 35 U.S.C. 102(b) as being anticipated by Bruwer U.S. Patent No. 5,686,904.

As to claim 25, Bruwer discloses a method of securely transferring data from an encoder to a decoder, the encoder including an encoder timer and the decoder including a decoder timer, the method including the steps of:

(a) during a learning process (i.e. Bruwer discloses a learning mode function) [column 7, lines 38-41] receiving a value of the encoder timer at the

decoder and determining a mathematical difference value between the value of the encoder timer and a value of the decoder timer (i.e. Bruwer discloses that the signal which is received by the decoder 12 using the data transfer interface 13 is converted to a logic signal which, in turn, is converted by the format detector 32, to a number which is applied to the decoder 34. The detector may be a pulse width modulation code detector. The decoding algorithm of decoder 34 decodes the variable portion of the number yielding counter and management code information, the integrity of which is checked by the part 35 using management code information in the storage 45, to verify the validity of the decoding operation. If it is valid, the unit 36 compares the decoded counter information with counter information held in the storage 46 to determine that the decoded number is valid and has not been used before. If the reception is valid then the relevant outputs are activated by the output management function 38) [column 12, lines 31-45];

(b) storing the mathematical difference value as a timer relationship value in the decoder (i.e. Bruwer discloses that the value is a counter value) [column 12, lines 31-45];

(c) at the encoder encrypting a data word to form a transmission word, the data word including information identifying a present value of the encoder timer (i.e. Bruwere discloses that for hopping code operation the non-linear encoding algorithm of encoder 18 uses the respective encoding key 64 to encode the counter information 66 and the management code 68 together with the 4 bit

function code 52. The 32 bit output code 70 is presented to the serial code generator 26. The counter information 66 is altered each time a transmission takes place for the respective virtual encoder) [column 18, lines 40-52];

(d) transmitting the transmission word to the decoder (i.e. Bruwer discloses that the decoding algorithm 34 uses the decoder key 82 from the correct memory block, i.e., the respective parameter set, to decode the hopping code 80. A 32 bit output 86 is presented to the integrity checking unit 35) [column 19, lines 13-16];

(e) at the decoder decrypting the transmission word [column 19, lines 13-16]; and

(f) determining a mathematical difference value between the present encoder timer value and a present decoder timer value (i.e. Bruwer discloses the 32 bit string comprises the original 4 bit function code 52, 16 bits of counter information 66 and the 12 bit management code 68. The integrity checking unit 35 checks for a predetermined relationship between the decoded management code 68, in the decoded word 86 and the stored version 90. If a defined relationship exists the decoding is held to have been valid) [column 19, lines 19-23]; and

(g) validating the transmission word by comparing the mathematical difference value between the present encoder timer and the present decoder timer value with the timer relationship value stored in the decoder (i.e. Bruwer discloses the decoded counter 66 is compared with the stored counter 94 held in the

respective parameter set. If the synchronization proves that the transmission is valid the stored value 94 is updated and the output control function unit 38 is advised accordingly) [column 19, lines 24-28].

As to claim 26, Bruwer discloses that the timer relationship value in the decoder is updated upon receipt of a valid transmission word to remove any discrepancies in the relationship between the encoder timer, decoder timer and the timer relationship value, without affecting the decoder timer (i.e. Bruwer discloses a synchronization checking unit 36 that verifies the validity of a transmission by comparing incoming counter information 92, produced by the integrity checking unit 35, with stored counter information 94 for the relevant encoder. The counter information 94 corresponds to the information held in the storage location 46 of the decoder 12 of FIG. 1 and includes an error correction function to ensure that the value of the counter is corrected when a spurious error is stored during a power failure [column 17, lines 5-13].

As to claim 27, Bruwer discloses that the updating of the timer relationship value is only done when necessary (i.e. Bruwer discloses the decoded counter 66 is compared with the stored counter 94 held in the respective parameter set. If the synchronization proves that the transmission is valid the stored value 94 is updated and the output control function unit 38 is advised accordingly) [column 19, lines 24-28].

As to claim 28, Bruwer discloses that the data word additionally includes at least one of the following: identity information pertaining to the encoder: command information; utility information; cold boot counter information; fixed code information; encoder power supply information and user derived information (i.e. Bruwer discloses an output management unit 38

manages the activation of or communication with other devices in the system. The unit 38 provides an indication of which of several functions is or are desired, whether the encoder 10 has ceased encoding and whether any special options are being requested. An indication of the identity of the encoder, from which the received signal originated, may also be made available. The unit 38 also makes use of storage space in the non-volatile memory 84 to manage options, determined by an option control unit 96, which may influence the format in which output signals 98, which are produced by the unit, are presented, or may enable or disable specific system features) [column 17, lines 14-25].

As to claim 29, Bruwer discloses that the user derived information is variable via one or more inputs to the encoder and is not known to a manufacturer of the encoder (i.e. Bruwer discloses the encoder encodes the challenge value and returns the encoded value to the decoder. The decoder now decodes the encoded value and compares it with the challenge value to establish the authenticity of the encoder and activate an output accordingly. This technique is generally known as IFF (identification friend or foe). In this application, the seed 60 of the encoder can be transferred to a decoder in learning mode. The key 82 can be generated and stored in the decoder as described in this description) [column 18, lines 20-39].

As to claim 30, Bruwer discloses that the transmission word includes the encrypted data word and at least one of the following: a cold boot counter value; command information; and identity information pertaining to the encoder (i.e. Bruwer discloses an output management unit 38 manages the activation of or communication with other devices in the system. The unit 38 provides an indication of which of several functions is or are desired, whether the encoder 10 has ceased encoding and whether any special options are being requested. An indication of the

identity of the encoder, from which the received signal originated, may also be made available. The unit 38 also makes use of storage space in the non-volatile memory 84 to manage options, determined by an option control unit 96, which may influence the format in which output signals 98, which are produced by the unit, are presented, or may enable or disable specific system features) [column 17, lines 14-25].

As to claim 34, Bruwer discloses the step of forming a plurality of transmission words. Bruwer discloses each transmission word being different from the other transmission words and being based at least on respective encoder high speed timer information, in response to a single activation of the encoder (i.e. Bruwer discloses a specific encoder can either use a single stored parameter set 56 along with various function requests, or different parameter sets with similar or different function requests. Typically, different parameter sets will be used if several different decoders are to be accessed. Several functions 15 might be accessible on each of these decoders. A single encoder might then be configured to access all the decoders, using different parameter sets, and be able to combine different function requests with each of the parameter sets) [column 15, lines 25-33].

As to claim 35, Bruwer discloses the step of forming only a single transmission word to be transmitted at least once in response to a single activation of the encoder (i.e. Bruwer discloses that the user now activates the encoder twice in the code hopping mode. During the first transmission the 64 bit code is received by the data transfer interface 13 and detected by the detector 32. The decoding algorithm of decoder 34 decodes the 32 bit variable code 80 using the newly generated decoder key 82 and stores the decoded management code 90 in the correct

location. The decoded counter information 94 is also stored in the correct location) [column 20, lines 7-14].

As to claim 36, Bruwer discloses the steps, during a learn mode, of storing learning information at the decoder which is transferred from the encoder, and deriving a key from the stored information (i.e. Bruwer discloses the data transfer interface 11 thus transmits information on the key generation seed and the serial number to the decoder 12. The data transfer interface 13 receives this information which is then detected by the detector 32 and passed to the key generation unit 42. This unit calculates a decoder key based on the incoming key generation seed and the manufacturer's master key which is held in the storage 40. The newly generated decoder key is stored in the location 44 and can be used for any future decoding operations, acting on the decoding algorithm of decoder 34) [column 12, lines 55-64].

As to claim 37, Bruwer discloses that the learning information is stored in a first-in-first-out structure (i.e. Bruwer discloses a learning control unit 100 manages the learning process by passing appropriate instructions to the detector 32, the decoding algorithm of decoder 34, the integrity checking unit 35, the synchronization checking unit 36 and a key address management unit 102. The unit 100 can be placed into the learning mode from outside the decoder, or special output combinations can be used to place the decoder in the learning mode, by passing the relevant signal from the management control unit 38 to the learning control unit 100. Typically a single memory block is reserved for this purpose. The decoder, including the learning control 100, is controlled by a controller 31) [column 17, lines 26-37].

As to claim 39, Bruwer discloses that multiple encoders are used with a single decoder comprising a single timer and multiple timer relationship values and wherein the various timer

relationship values are determined, one for each encoder during its respective learning process (i.e. Bruwere discloses the ability to employ more than one parameter set for an encoder enables the encoder to address more than one decoder without interference, even if a single operating frequency is shared. The encoder appears to be a chosen one of several independent encoders, each of which is capable of independent operation, hence the phrase "virtual encoder". Clearly the encoders are not capable of simultaneous operation. For hopping code operation the non-linear encoding algorithm of encoder 18 uses the respective encoding key 64 to encode the counter information 66 and the management code 68 together with the 4 bit function code 52. The 32 bit output code 70 is presented to the serial code generator 26. The counter information 66 is altered each time a transmission takes place for the respective virtual encoder. The serial code generator 26 appends the relevant encoder's serial number 62 to the encoded part thereby forming a single output code 72 which is presented to the input of the data transfer interface 11 in PWM serial form (in this example) [column 18, lines 40-57].

As to claim 40, Bruwer discloses the step of ensuring that the encoder timer at its slowest variance is faster than the decoder timer at its fastest variance [column 17, lines 5-13].

As to claim 41, Bruwer discloses that if the decoder timer lies within a predetermined window when a valid transmission word is received, the decoder timer is re-synchronised with the encoder timer by automatically adjusting the timer relationship value to remove any discrepancies in the relationship between the timers and the timer relationship value (i.e. Bruwer discloses that the decoder includes a detector 32 which has means for compensating for differences in transmission length due to timing differences between the encoder and the decoder) [column 16, lines 54-56].

As to claim 42, Bruwer discloses that the re-synchronization is effected by a bi-directional transfer of data between the encoder and decoder [column 10, lines 37-50].

As to claim 43, Bruwer discloses that the timer relationship value or a window is adjusted in size to compensate for drift between the encoder timer and the decoder timer, before validation occurs, such adjustment being based at least on the time period elapsed since the last adjustment of the timer relationship value [column 21, lines 42-62].

As to claim 44, Bruwer discloses that the timer relationship value or a window its adjusted in size to compensate for drift between the encoder timer and the decoder timer, such adjustment being based at least on information about the drift between the encoder timer and the decoder timer determined by analysing at least two successive valid transmissions received with a period of time elapsed between them and the adjustment being performed before carrying out step (f) on a currently received transmission word [column 21, lines 42-62].

As to claim 45, Bruwer discloses that a window size is assigned to the decoder and the encoder timer is operated to ensure that the encoder timer information does not fall outside the window for a valid transmission of a transmission word in normal operational circumstances [column 21, lines 42-62].

As to claim 46, Bruwer discloses that the timer relationship value is allowed a window when validation of the transmission word occurs and the timer relationship value is adjusted based on knowledge of drift between the encoder timer, the decoder timer and the time period elapsed since a previous valid transmission of a transmission word [column 21, lines 42-62].

As to claim 47, Bruwer discloses that the window size is dynamically adjusted and such adjustment is based on the time period elapsed since the previous adjustment of the timer relationship value [column 21, lines 42-62].

As to claim 48, Bruwer discloses that the window size has a minimum value [column 21, lines 42-62].

As to claim 49, Bruwer discloses that the window size has a maximum value [column 21, lines 42-62].

As to claim 50, Bruwer discloses that the transmission data word also includes a timer value that changes fast so that each transmission word in a sequence of transmission words which are transmitted based on a single continuous activation of the encoder, differs from the other transmission words (i.e. Bruwer discloses that the counter/storage and error correction 16 is updated each time the encoder is actuated. When several parameter sets are used, however, only the counter information in a particular parameter set is updated each time the corresponding virtual encoder is used) [column 15, lines 20-24].

As to claim 51, Bruwer discloses that a higher security re-synchronization of the encoder and decoder timers is achieved at least by using the decoder to generate control signals that are used to, directly or indirectly, control the activation of the encoder (i.e. Bruwer discloses the controller part 49 of the encoder controls the encoder operation. the control part 49 is connected to each part of the encoder and senses the operational state of each part and provides operational control signals to each part to control the operation and functioning of the encoder as a whole. Encoder commands are received from the external buttons and used to initiate operational control signals to the rest of the encoder. Control signals can consist of encoder mode changes,

selection of transmission information and activation of all the different parts as necessary) [column 11, lines 6-15].

As to claim 52, Bruwer discloses an apparatus for transferring data which includes an encoder (i.e. Bruwere discloses that for hopping code operation the non-linear encoding algorithm of encoder 18 uses the respective encoding key 64 to encode the counter information 66 and the management code 68 together with the 4 bit function code 52. The 32 bit output code 70 is presented to the serial code generator 26. The counter information 66 is altered each time a transmission takes place for the respective virtual encoder) [column 18, lines 40-52] and a decoder (i.e. Bruwer discloses that the decoding algorithm 34 uses the decoder key 82 from the correct memory block, i.e., the respective parameter set, to decode the hopping code 80. A 32 bit output 86 is presented to the integrity checking unit 35) [column 19, lines 13-16] and wherein the encoder includes a timer and an encryption unit for encrypting data which includes timer information from the encoder timer (i.e. Bruwer discloses the 32 bit string comprises the original 4 bit function code 52, 16 bits of counter information 66 and the 12 bit management code 68. The integrity checking unit 35 checks for a predetermined relationship between the decoded management code 68, in the decoded word 86 and the stored version 90. If a defined relationship exists the decoding is held to have been valid) [column 19, lines 19-23], thereby to form a transmission word, and the decoder includes a decoder timer, a receiver unit for receiving the encrypted transmission word, a decryption unit for decrypting [column 19, lines 19-23] the received transmission word to extract, at least, the timer information from the encoder, a difference determination unit for determining a mathematical difference value between the encoder timer value and the decoder timer value, and a comparator unit for comparing the

mathematical difference value and a timer relationship value stored in the decoder (i.e. Bruwer discloses the 32 bit string comprises the original 4 bit function code 52, 16 bits of counter information 66 and the 12 bit management code 68. The integrity checking unit 35 checks for a predetermined relationship between the decoded management code 68, in the decoded word 86 and the stored version 90. If a defined relationship exists the decoding is held to have been valid) [column 19, lines 19-23], to determine the validity of the transmission word, the timer relationship value being established during a learning process of the encoder and decoder and being representative of a mathematical difference between a value of the encoder timer that is received by the decoder during the learning process and a value of the decoder timer during the learning process (i.e. Bruwer discloses the decoded counter 66 is compared with the stored counter 94 held in the respective parameter set. If the synchronization proves that the transmission is valid the stored value 94 is updated and the output control function unit 38 is advised accordingly) [column 19, lines 24-28].

As to claim 53, Bruwer discloses that the apparatus includes a unit for adjusting the timer relationship value when a valid transmission word is received to remove at least one of:

(a) any drift that has occurred (i.e. Bruwer discloses that the decoder includes a detector 32 which has means for compensating for differences in transmission length due to timing differences between the encoder and the decoder) [column 16, lines 54-56]; and

(b) any other accumulating discrepancy in the relationship between the encoder timer, decoder timer and the timer relationship value (i.e. Bruwer discloses that the decoder includes a detector 32 which has means for

compensating for differences in transmission length due to timing differences between the encoder and the decoder) [column 16, lines 54-56].

As to claim 54, Bruwer discloses that the timer relationship value is adjusted before checking the validity of a received transmission word, such adjustment being based at least on a known drift between the encoder timer and the decoder timer as well as the time elapsed since a previous adjustment of the timer relationship value (i.e. Bruwer discloses that the decoder includes a detector 32 which has means for compensating for differences in transmission length due to timing differences between the encoder and the decoder) [column 16, lines 54-56].

As to claim 55, Bruwer discloses that the decoder is assigned a window size which determines acceptable drift between the encoder timer and decoder timer for a valid transmission [column 21, lines 42-62].

As to claim 56, Bruwer discloses that the window size is adjusted before checking the validity of a received transmission word, the adjustment being based at least on the time period elapsed since the reception of a previously received valid transmission word [column 21, lines 42-62].

As to claim 57, Bruwer discloses that a re-synchronisation of the encoder and decoder can be achieved by the decoder providing control signals for the encoder inputs (i.e. Bruwer discloses the controller part 49 of the encoder controls the encoder operation. the control part 49 is connected to each part of the encoder and senses the operational state of each part and provides operational control signals to each part to control the operation and functioning of the encoder as a whole. Encoder commands are received from the external buttons and used to initiate operational control signals to the rest of the encoder. Control signals can consist of

encoder mode changes, selection of transmission information and activation of all the different parts as necessary) [column 11, lines 6-15].

As to claim 58, Bruwer discloses a transmitter which includes an encoder timer and an encryption unit for encrypting data which at least in part is based on timer information from the encoder timer thereby to form the transmission word, and wherein the encoder timer is permitted to run only for a limited period after each activation of the transmitter (i.e. Bruwer discloses that the counter value is changed every time the power is disconnected [column 12, lines 6-24].

As to claim 59, Bruwer discloses a transmitter which includes an encoder timer and an encryption unit for encrypting data which at least in part is based on timer information from the encoder timer thereby to form the transmission word and wherein, when the encoder timer runs beyond a predetermined limit, the transmitter will upon a single activation transmit more than one transmission value equivalent to the transmitter being activated twice (i.e. Bruwer discloses the 32 bit string comprises the original 4 bit function code 52, 16 bits of counter information 66 and the 12 bit management code 68. The integrity checking unit 35 checks for a predetermined relationship between the decoded management code 68, in the decoded word 86 and the stored version 90. If a defined relationship exists the decoding is held to have been valid) [column 19, lines 19-23].

As to claim 60, Bruwer discloses a decoder which includes a timer, an input to receive the transmission word, a decryption unit to decrypt the transmission word and obtain the transmitted timer information, memory to store the timer relationship value and a comparison unit to compare the transmitted timer information to time information generated by the decoder timer and to the stored timer relationship value, and means, responsive to the comparison unit, to

activate an output if certain criteria are met in the comparison (i.e. Bruwer discloses that the decoding algorithm 34 uses the decoder key 82 from the correct memory block, i.e., the respective parameter set, to decode the hopping code 80. A 32 bit output 86 is presented to the integrity checking unit 35) [column 19, lines 13-16].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bruwer U.S. Patent No. 5,686,904 as applied to claim 25 above, and further in view of Belt et al U.S. Patent No. 5,446,904.

As to claim 31, Bruwer does not teach that the cold boot counter value, when included in the transmission word, is transmitted in the clear.

Belt et al teaches a cold boot counter value that is transmitted in the clear [column 38, lines 52-64].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bruwer so that when a cold boot counter value is included in the transmission word that it would have been transmitted in the clear.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bruwer by the teaching of Asprey because it insures that the time information on the system remains accurate [column 3 line 66 to column 4 line 4].

9. Claims 32, 33 and 61-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruwer U.S. Patent No. 5,686,904 as applied to claim 25 above, and further in view of Rysko et al U.S. Patent No. 5,155,729.

As to claims 32, 33 and 61-63, Bruwer does not teach the step of keeping the encoder and decoder in synchronism using a cold boot counter which is changed each time the encoder is powered up or comes out of reset. Bruwer does not teach including a count value of the cold boot counter in the transmission word. Bruwer does not teach that the cold boot counter value, or part thereof, when included in the transmission word, is transmitted in the clear.

Rysko et al teaches a cold boot counter that is changed each time a system is powered up or comes out of reset. Rysko et al teaches including a count value of the cold boot counter in the transmission word. Rysko et al teaches that the cold boot counter value would have been transmitted with the transmission word in the clear [column 6, lines 29-64].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bruwer so that the encoder and decoder would have been in synchronism using a cold boot counter which would have changed each the time the encoder was powered up or came out of reset. The cold boot counter value would have been included in the transmission word and transmitted in the clear.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bruwer by the teaching of Rysko et al because it prevents for endless switchover attempts, i.e. "ping-pong" between redundant processors [column 2, lines 28-41].

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aravind K. Moorthy whose telephone number is 571-272-3793. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aravind K Moorthy/
Examiner, Art Unit 2131
/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art Unit 2131